#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 82.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022643 Address: 333 Burma Road **Date Inspected:** 22-Mar-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1530

Contractor: Westmont Industries **Location:** Santa Fe Springs, CA.

Ruben Dominguez **CWI Name: CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Travelers

## **Summary of Items Observed:**

This Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding, QC inspection, non-destructive testing and painting of the Travelers. Upon the arrival of the QA Inspector, the following observations were made:

### Traveler Test Rack

This QA Inspector randomly observed WMI production personnel performing fitting, welding and cutting activities on various assemblies for the Traveler Test Rack.

#### **SAS-WB** Traveler

This QA Inspector observed WMI production welder Mr. Jose Rodriguez (WID # 3031) continuing to perform Flux Core Arc Welding (FCAW) activities on the SAS-WB Traveler frame assemblies. This QA Inspector observed Mr. Rodriguez performing the FCAW in all positions on tube steel and plate material randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Juan Jimenez (WID # 3059) continuing to perform Flux Core Arc Welding (FCAW) activities on the SAS-WB Traveler frame assemblies. This QA Inspector observed Mr.Jimenez performing the FCAW in all positions on tube steel and plate material randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Jesus Rayas (WID # 3197) performing Flux Core Arc Welding (FCAW) fitting and tacking activities on the SAS-WB Traveler elevating platform assembly. This QA Inspector observed Mr. Rayas performing the FCAW activities on channel and plate material, randomly

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

throughout the shift.

This QA Inspector observed WMI production welder Mr. Richard Fuentes (WID # 3201) performing Flux Core Arc Welding (FCAW) fitting and tacking activities on the SAS-WB Traveler elevating platform assembly. This QA Inspector observed Mr. Fuentes performing the FCAW activities on channel and plate material, randomly throughout the shift.

This QA Inspector observed WMI production personnel Mr. Cesar Canales and Mr. Raymundo Anaya performing layout and fitting activities for the SAS-WB frame assemblies.

### E2/E3-EB Traveler

This QA Inspector observed WMI production welder Mr. Jose Miranda (WID # 3083) continuing to perform Flux Core Arc Welding (FCAW) activities on the E2/E3-EB Traveler suspension arm assemblies. This QA Inspector observed Mr. Miranda performing the FCAW welding activities on tube steel and plate material, randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Jose Delgadillo (WID # 3193) continuing to perform Flux Core Arc Welding (FCAW) activities on the E2/E3-EB Traveler suspension arm assemblies. This QA Inspector observed Mr. Delgadillo performing the FCAW welding activities on tube steel and plate material, randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Mike Ruiz (WID # 3155) performing Flux Core Arc Welding (FCAW) activities on the E2/E3-EB Traveler suspension arm assemblies. This QA Inspector observed Mr. Ruiz performing the FCAW welding activities on tube steel and plate material, randomly throughout the shift.

This QA Inspector randomly observed that Smith Emery QC Inspector Mr. Ruben Dominguez was present, during the above mentioned welding and fitting activities. During random observation, this QA Inspector observed that the applicable WPS's and copies of the shop drawings, appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed. This QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. This QA Inspector randomly observed QC Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable WPS.

Paint: SAS and E2/E3-EB Travelers

This QA Inspector observed that RPI Coating personnel were present and appeared to be fixing the temporary tarps in the sandblast and primer area. This QA Inspector observed that the steel cables holding the tarps, appeared to have been broken, due extreme wind conditions the previous evening. Later in the shift, this QA Inspector observed that RPI personnel appeared to be performing sweep blasting activities on random areas of the elevating and platform balcony assemblies. During observation, this QA Inspector spoke with RPI Coating representative Mr. Carlos Torres and Mr. Torres explained that the sweep blasting was being performed on areas in which minor rust and mill scale were present.

After the sweep blast was complete, Mr. Torres then requested that this QA Inspector perform visual testing on the

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

areas. This QA Inspector then performed the testing and observed that the minor rust and mill scale appeared to be removed. This QA Inspector then observed RPI Coating Quality Control Representative Mr. Andrew Gonzales performing what appeared to be random surface profile checks on the sweep blasted base metal surfaces. This QA Inspector observed Mr. Gonzales utilizing what appeared to be Testex Press-O-Film and a micrometer to perform the testing. Initially, this QA Inspector observed Mr. Gonzales applying the film to the blasted surface then utilize one end of a pen to perform rubbing activities on the clear portion of the test strip. This QA Inspector then observed Mr. Gonzales utilize a micrometer to measure the surface profile on the clear film part of the strip, in which the rubbing was performed. Mr. Gonzales explained to this QA Inspector that the initial setting on the micrometer was set at 2mils over, due to the thickness of the Press-O-Film paper. During observation, this QA Inspector observed that the readings appeared to be 2.9 mils, 2.9 mils and 2.8 mils.

This QA Inspector noted that the contract requires a surface profile of 1.57 mils (40 um) - 3.15 mils (80 um) and that the above mentioned tested profile appears to be in compliance with the contract requirements. This QA Inspector was then informed by Mr. Gonzales that primer application will soon start on the above mentioned areas, within the next hour.

This QA Inspector observed that the activities mentioned above, appeared to be in compliance with the contract requirements and this QA Inspector observed no non-conforming issues, on this date.

### **Summary of Conversations:**

As noted above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Edmondson,Fred	QA Reviewer